

WHAT IS CLAIMED IS:

1. A metal-bonded grinding tool comprising:  
a base; and  
abrasive grains bonded to said base by means of a  
metal bond matrix containing a Cu alloy as a main  
component;

wherein said metal bond matrix contains at least  
one of an alloy phase, a mixed phase, and an  
intermetallic compound of Zr and Ti.

2. A metal-bonded grinding tool according to claim  
1, wherein a content of said at least one of an alloy  
phase, a mixed phase, and an intermetallic compound of Zr  
and Ti in said metal bond matrix is in a range of 3.8 to  
19.2 wt%.

3. A metal-bonded grinding tool according to claim  
2, wherein the content of said at least one of an alloy  
phase, a mixed phase, and an intermetallic compound of Zr  
and Ti in said metal bond matrix is in a range of 6.4 to  
14.1 wt%.

4. A metal-bonded grinding tool according to claim  
1, wherein a weight ratio of Ti to Zr is in a range of  
0.5 to 2.0.

5. A metal-bonded grinding tool according to claim  
1, wherein said Cu alloy is selected from a group

consisting of a bronze containing 10 to 33 wt% of Sn, a brass containing 5 to 20 wt% of Zn, and an aluminum bronze containing 5 to 20 wt% of Al.

6. A metal-bonded grinding tool according to claim 1, wherein said abrasive grains are abrasive grains of a material selected from a group consisting of diamond, cubic boron nitride, silicon carbide, and cemented carbide.